Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-3. (*Cancelled*)

4. (*Currently Amended*) ~~The circuit of claim 3,~~ An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor;

wherein the process compensation circuit includes a replica device circuit having a replica transistor that replicates the characteristics of the first transistor, and

~~wherein the replica device circuit further includes~~ a constant current source coupled to the replica transistor.

5. (*Original*) The circuit of claim 4, wherein the replica transistor is connected as a diode.

6. (*Currently Amended*) The circuit of claim [[1]] 4, wherein the process compensation circuit and the first transistor are included in a single integrated circuit.

7. (*Cancelled*)

8. (*Currently Amended*) ~~The circuit of claim 7,~~ An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor;

wherein the biasing circuit further includes a bias control circuit coupled to the gate of the first transistor; and

wherein the bias control circuit includes a variable current source coupled to a control circuit.

9. (*Original*) The circuit of claim 8, wherein the control circuit includes a digital to analog converter.

10. (*Cancelled*)

11. (*Currently Amended*) ~~The circuit of claim 10,~~ An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor;

wherein the biasing circuit further includes a temperature compensation circuit coupled to the gate of the first translator; and

wherein the temperature compensation circuit includes a temperature proportional current source.

12. (*Currently Amended*) The circuit of claim [[10]] 11, wherein the temperature compensation circuit and the first transistor are included in a single integrated circuit.

13. (*Currently Amended*) The circuit of claim [[1]] 4, wherein the amplifier circuit is included within a transmitter.

14. (*Currently Amended*) The circuit of claim [[1]] 4, wherein the amplifier circuit is included within a wireless data link transmitter.

15. (*Currently Amended*) A method of supplying a process compensated DC bias voltage comprising:

generating a current using a constant current source;

producing the process compensated DC bias voltage in a process compensation circuit based on the current; and

applying the process compensated DC bias voltage to a gate of a first transistor, the process compensation circuit and the first transistor being on a single integrated circuit.

16. (*Currently Amended*) ~~The method of claim 15,~~ A method of supplying a process compensated DC bias voltage comprising:

producing the process compensated DC bias voltage in a process compensation circuit; and

applying the process compensated DC bias voltage to a gate of a first transistor, the process compensation circuit and the first transistor being on a single integrated circuit;

wherein the process compensated DC bias voltage is substantially equal to a threshold voltage of the first transistor.

17. (*Original*) The method of claim 15, further comprising adjusting the process compensated DC bias voltage to select a desired class of operation for the first transistor.

18. (*Original*) The method of claim 17, wherein adjusting the process compensated DC bias voltage includes receiving a control signal.

19. (*Original*) The method of claim 18, wherein the control signal includes a digital control signal.

20. (*Currently Amended*) The method of claim 19, wherein receiving the control signal ~~can include~~ includes converting the digital control signal to an analog signal.

21. (*Original*) The method of claim 15, further comprising adjusting the process compensated DC bias voltage to compensate for a temperature of the integrated circuit.

22. (*Currently Amended*) A data link system comprising:

a first transmitter including an amplifier that includes:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor, wherein the process compensation circuit and the first transistor are included in a single integrated circuit;

wherein the process compensation circuit includes a replica device circuit having

a replica transistor that replicates the characteristics of the first transistor, and

a constant current source coupled to the replica transistor.

23. (*Currently Amended*) A power amplifier circuit comprising:

a first transistor; and

a biasing circuit ~~including a process compensation circuit, the biasing circuit being~~ coupled to a gate of the first transistor, the biasing circuit including:

a process compensation circuit;

a bias control circuit coupled to the gate of the first transistor; and

a temperature compensation circuit coupled to the gate of the first transistor, wherein the process compensation circuit, the temperature compensation circuit and the first transistor are included in a single integrated circuit; and

wherein the temperature compensation circuit includes a temperature proportional current source.